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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/085,638

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7590

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EXAMINER

TRAIL, ALLYSON NEEL

ART UNIT

PAPER NUMBER

2876

DATE MAILED: 03/25/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/085,638

**Applicant(s)**

MORIMOTO, NOBUYOSHI

**Examiner**

Allyson N Trail

**Art Unit**

2876

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-42 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-41 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. ____   |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>1/13/2003</u> .   | 6) <input type="checkbox"/> Other: ____                                     |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-26 and 28-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beller et al (5,602,377) in view of Azcua et al (4,310,885).

Beller et al teaches the following in regards to claims 1, 6, 16, 18, 29, 30, 35, 36, and 39-42:

"This invention relates to a bar code dataform scanning and labeling method and apparatus and, more particularly, a method and apparatus capable of scanning a bar code dataform, modifying encoded bar code dataform data and printing a bar code dataform label incorporating the modified data." (Col. 1, lines 7-12).

"Dataforms may be printed in invisible ink, magnetically recorded via magnetic strips or magnetic ink fonts, electromagnetically recorded via RF tags, engraved, stamped, tattooed (on skin), formed by ion doping (for semiconductor wafers) or biochemical binding, etc." (Col. 1, lines 25-30).

"A merchandiser will find it valuable to have a bar code dataform which provides more than just a product identification key. For example, a retailer may wish to incorporate information relating to where and when the product was purchased, at what price, where is it being stored, to which store will it be shipped. If the retailer has

modified the product or added an option, for example, a car dealer rustproofs a new car received from the manufacturer, the retailer may want to modify the manufacturer's bar code dataform to reflect the value added. Upon sale of the product, the retailer may wish to modify the manufacturer's bar code dataform to incorporate sales transaction information, e.g., who bought the product; on what date was the product purchased; at what price; under what invoice number; is there a discount or promotional program associated with the product; and where is the product to be delivered?" (Col. 3, lines 5-20).

"FIG. 1 illustrates the preferred embodiment of a bar coding scanning and labeling device 10 of the present invention. The scanning and labeling device 10 is adapted to scan an original bar code dataform 12 affixed to a product 14 and print a modified bar code dataform 16 on a label 17." (Col. 5, lines 54-58).

"In an assembly line embodiment of this invention the modified bar code dataform may track the product down the line. The additional data incorporated into a modified bar code dataform may include data representative of a processing step performed on a product." (Col. 7, lines 13-20).

Beller et al teaches the following in regards to claims 2:

"The use of bar code dataforms for product identification purposes has achieved widespread acceptance. Typically, the manufacturer of a product generates a bar code dataform which represents a unique product identification key. The bar code dataform is used in conjunction with a computer accessible database. The identification key is associated with or, using computer terminology, points to a record

address in a data file stored on a database secondary storage device.” (Col. 2, lines 1-8).

“The modified bar code dataform 16 incorporates additional data such as data retrieved from a database 18 accessed through a remote device 20 as well as scanned data from the original bar code dataform 12.” (Col. 5, lines 60-63).

Beller teaches the following in regards to claim 5:

“In an assembly line embodiment of this invention the modified bar code dataform may track the product down the line. The additional data incorporated into a modified bar code dataform may include data representative of a processing step performed on a product.” (Col. 7, lines 13-20).

Beller teaches the following in regards to claims 8 and 34:

“The additional data incorporated into a modified bar code dataform may include data representative of a processing step performed on a product. For example, a car tracking dataform may be updated when rust proofing is added to the car, or quality control testing data may be added when the product is quality control tested.” (Col. 7, lines 15-20).

“For example, assuming the user is a retailer, the user may request additional data concerning the product such as date of purchase of the product from the product's distributor, purchase price and/or identification of distributor/manufacture the product was purchased from. Other examples of data that a retailer may find advantageous to incorporate in a modified bar code dataform would include identification of the

warehouse where the product will be stored, the identification of the store where the product will be offered for sale.” (Col. 9, lines 33-41).

Beller et al teaches the following in regards to claims 9, 10, 14, and 20:

“If the retailer has modified the product or added an option, for example, a car dealer rustproofs a new car received from the manufacturer, the retailer may want to modify the manufacturer's bar code dataform to reflect the value added.” (Col. 3, lines 10-14).

Beller et al teaches the following in regards to claims 11, 12, 25, and 37:

As stated above, “Dataforms may be printed in invisible ink, magnetically recorded via magnetic strips or magnetic ink fonts, electromagnetically recorded via RF tags, engraved, stamped, tattooed (on skin), formed by ion doping (for semiconductor wafers) or biochemical binding, etc.” (Col. 1, lines 25-30). RF tags inherently have a wireless interface and their own power supply.

Beller et al teaches the following in regards to claims 13 and 24:

“For example, the additional data may have been previously stored in the device's internal random access memory (RAM) 36 or stored on a PCMCIA card (not shown) inserted into a socket or connector (not shown) on the scanning and labeling device 10.” (Col. 6, lines 42-46). PCMCIA cards are known to commonly use flash memory.

Beller et al teaches the following in regards to claim 15:

“A bar code scanning and label generating apparatus in accordance with the present invention includes a microprocessor, a scan engine coupled to the

microprocessor for scanning a bar code dataform, and a decoder/encoder electrically coupled to the microprocessor for decoding a scanned bar code dataform into machine readable data and encoding machine readable data into a bar code dataform. The apparatus further includes interface means coupled to the microprocessor for actuation of the apparatus and selection of data to be included in a modified bar code dataform, the dataform including at least a portion of the scanned dataform data and additional data. An electronic memory electrically coupled to the microprocessor is provided for storing data. Preferably, the apparatus further includes communications circuitry for transmitting data to and data from a remote device, the data received from the remote device including at least a portion of the additional data.” (Col. 4, lines 33-50).

Beller et al teaches the following in regards to claims 21 and 22:

Figure 1 shows a hand-held wireless communications device 10, for storing and reader information indicative of the processing.

Beller et al teaches the following in regards to claims 23:

Figure 1 shows a remote device 20, which contains a database and acts as a central computer. The remote device communicates with the wireless communication devices.

Beller et al teaches the following in regards to claims 26.

“The scanning and labeling device 10 includes a scan engine 30 for scanning the original bar code dataform 12 and communications circuitry 31 (FIG. 3) including a transceiver coupled to an externally mounted antenna 32. The database 18 will be part

of the user's point of sale network and will include purchasing and sales files as well as inventory and product information files.

The database 18 is accessed through the remote device 20, typically a computer, which also includes a transceiver for communications via radio frequency (RF) signals with devices such as the scanning and labeling device 10 as well as other remote devices." (Col. 6, lines 26-37).

Beller et al teaches the following in regards to claims 28.

"Typically, a merchandiser, i.e., a wholesaler, distributor or retailer, will use the identification key as part of a pricing and inventory control system. For example, at the retail level, a retailer utilizing a computerized point of sales network for pricing and inventory will have at least two files accessible to the central computer controlling the network; a pricing file and an inventory file." (Col. 2, lines 36-42).

Beller et al teaches above about determining the value added. Beller et al additionally teaches in regards to claim 31:

"The scanning and labeling device communications circuitry 31 includes a spread spectrum radio module for real time communication with remote devices including the remote device 20." (Col. 10, lines 27-30).

Beller et al teaches the following in regards to claim 38.

Shown in figure 1 is an interface used to transmit and receive information to the microprocessor. Whenever the memory device needs to be updated, which is periodically, information is transmitted and received using the interface.



Beller et al's teachings are discussed above. Beller et al teaches a bar code scanning and labeling apparatus for scanning and decoding a bar code associated with a product. Beller et al also teaches updating the bar code to reflect any value added to a product as the product is being manufactured or improved. Beller et al fails however to teach updating the tax information as well as the new value of the product.

The examiner believes it is inherent that if value is added to a product, which makes the price of the product increase, that additional taxes will also be added to the price of the product to further increase the price. The method of increasing the value of a product as the product is improved and reflecting that increase on a memory device is fully taught by Beller et al. An additional reference is being included that teaches how the taxes increase as the value of a product or products grow.

Azcua et al (4,310,885) teaches the following in regards to claims

"Tax button 56 is actuated after each taxable item is indicated and the data processing subsystem calculates the tax on each taxable item. An arithmetic unit in the data processor sums the individual prices of each identified item, as well as the tax on each item, so as to calculate the total price of the sale transaction." (Col. 6, lines 48-54).

In view of Azcua et al's teachings it would have been obvious to one of ordinary skill in the art at the time the invention was made to in addition to increasing the value of a product as the product is developed and storing the new value of the developed product on a memory device, also keep track of the tax increase information. As

explained above, this is believed to be an obvious calculation. Azcua et al however also teaches the importance of updating taxing information as a total price is calculated.

3. Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Beller et al (5,602,377) in combination with Azcua et al (4,310,885) and in further view of Poore et al (6,202,933).

Beller et al in combination with Azcua et al's teachings are discussed above. The combination however fails to teach encrypting the information indicative of the processing during the transmitting.

Poore teaches the following in regards to claim 27:

In order to prevent or reduce the likelihood of a merchant or other person accepting a forged card (as opposed to a counterfeit card) as a legitimate card a barcode is provided on the front of the card which includes an encrypted version of at least a portion of the information contained on the magnetic stripe." (Col. 1, lines 55-60).

In view of Poore et al's teachings it would have been obvious to one of ordinary skill in the art at the time the invention was made to use an item identifier where the information indicative of the processing is encrypted. Both Beller et al and Azcua et al teach adding value or price to a product as the product is being developed. The item identifier is what is used to view the value of the product. If the identifier is tampered with the value may be false. Having the identifier and the information which is stored on the identifier being encrypted ensures that the identifier cannot be altered and therefore correct information will be available for processing.

**Conclusion**

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Markham et al (2003/0155415), Hawkins et al (6,029,146), Goodwin et al (6,542,873), Golden et al (5,774,972), Francisco et al (5,799,283), Reber et al (5,969,324), Manzi et al (6,298,333), and Jones et al (2003/0132281).

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to *Allyson N. Trail* whose telephone number is (571) 272-2406. The examiner can normally be reached between the hours of 7:30AM to 4:00PM Monday thru Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee, can be reached on (571) 272-2398. The fax phone number for this Group is (703) 872-9306.

Communications via Internet e-mail regarding this application, other than those under 35 U.S.C. 132 or which otherwise require a signature, may be used by the applicant and should be addressed to [[allyson.trail@uspto.gov](mailto:allyson.trail@uspto.gov)].

*All Internet e-mail communications will be made of record in the application file. PTO employees do not engage in Internet communications where there exists a possibility that sensitive information could be identified or exchanged unless the record includes a properly signed express waiver of the confidentiality requirements of 35 U.S.C. 122. This is more clearly set forth in the Interim Internet Usage Policy published in the Official Gazette of the Patent and Trademark on February 25, 1997 at 1195 OG 89.*

Art Unit: 2876

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0956.

Allyson N. Trail  
Patent Examiner  
Art Unit 2876  
March 19, 2004

*Jared J. Fureman*  
**JARED J. FUREMAN**  
**PRIMARY EXAMINER**